

WHAT IS CLAIMED IS:

1. A magnetic recoding medium comprising;

a substrate, an underlayer formed over said substrate,

a first magnetic layer composed of Co, Pt, and Cr, which is formed on said underlayer,

a non-magnetic intermediate layer containing at least one element selected from the group consisting of Ru, Ir, and Rh, which is formed on said first underlayer, and

a second magnetic layer containing Co as main component, wherein

said first magnetic layer and said second magnetic layer being magnetized in the antiparallel direction in the absence of an applied magnetic field, and the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

2. A magnetic recording medium including a substrate and a magnetic recording layer formed thereon with an underlayer interposed between them, wherein

said magnetic layer comprises;

a first magnetic layer containing Pt formed on said

underlayer,

a second magnetic layer, and

a non-magnetic intermediate layer formed between
said first magnetic layer and said second magnetic layer,

said first magnetic layer and said second magnetic
layer being magnetized in the antiparallel direction in
the absence of an applied magnetic field, the amount of
Pt contained in said first magnetic layer is no less
than 3 at% and no more than 9 at%.

3. A magnetic recording medium according to Claim
1, wherein said underlayer contains Cr and Ti.

4. A magnetic recording medium according to Claim
3, wherein said underlayer additionally contains B.

5. A magnetic recording medium according to Claim
1, wherein said non-magnetic intermediate layer has a
thickness of 0.3 to 0.9 nm.

6. A magnetic recording medium according to Claim
3 further comprising;

a metal film having an amorphous structure or

microcrystalline structure, which is formed between said substrate and said underlayer containing Cr and Ti.

7. A magnetic recording medium according to Claim 6, wherein;

the metal film composed of an alloy containing Ta and Ni.

8. A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is defined in Claim 1.

9. A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writ-

ing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is defined in Claim 2.